

# *briefing notes - road safety issues*

## *Invercargill City*

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2003–2007 period.

The intent of the report is to highlight the key road safety issues and be a resource to help identify possible ways to reduce the number of road deaths and injuries in Invercargill City.

This report is the ninth road safety report for Invercargill City. All the material unless otherwise stated in this report applies to both local roads and to Transit New Zealand (Transit NZ) roads.

In each new report one year's data is added to a five year block and the oldest dropped so it is unlikely that the core issues would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when Invercargill City is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly). We have included a brief overview of crashes in the district.

We encourage local bodies to use the free access to the Ministry of Transport's Crash Analysis System to delve deeper into the highlighted issues.

### Major road safety issues

#### Invercargill City

Intersections

Young drivers

### 2007 road trauma

#### Casualties

#### Invercargill City

Deaths	5
Serious casualties	45
Minor casualties	242

#### Nationally

Speed

Alcohol

Failure to give way

Restraints

#### Crashes

#### Invercargill City

Fatal crashes	4
Serious injury crashes	37
Minor injury crashes	162
Non-injury crashes	338

## Overview

In 2007 on local roads in Invercargill City there were 146 injury crashes and 249 non-injury crashes. In addition there were 57 injury crashes and 90 non-injury crashes on Transit New Zealand (Transit NZ) roads, both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 203 injury crashes, by rural or urban areas for all roads, (rural is defined as an area with a speed limit of 80km/h or more).

### Casualties by environment 2007

	Fatalities	Serious injuries	Minor injuries	Total
Rural	4	13	46	63
Urban	1	32	196	229
Total	5	45	242	292

The annual numbers of fatal and serious injury crashes in the district have generally increased from less than 20 in 1998 and 1999 to a high of 67 in 2006. They then decreased to 41 in 2007. Minor and non-injury crashes have increased from 294 in 1998 to a high of 501 in 2007.

### Crash trends

Year	Fatal crashes	Serious injury crashes	Minor injury crashes	Non-injury crashes
1998	5	14	68	226
1999	2	14	55	274
2000	2	28	75	262
2001	5	33	127	304
2002	6	43	183	284
2003	2	51	157	322
2004	2	37	159	282
2005	0	47	165	334
2006	2	65	198	279
2007	4	37	162	339

### Injury crashes 2003 - 2007

Crash type or contributory cause 2003 to 2007	Local Road Percent of injury crashes	Transit Road Percent of injury crashes
Alcohol	9%	10%
Too fast	14%	10%
Straight—lost control crash	10%	11%
Bend—lost control crash	12%	11%
Crossing / turning crash	45%	39%
Road factors	14%	11%
Vulnerable road users (Percent of casualties)	16%	12%
1, Pedestrians	5%	6%
2, Cyclists	6%	3%
3, Motorcyclists	5%	3%

Further information about 2003 to 2007 injury and non-injury crashes on local roads:

- Worst month March,
- Worst day Friday
- 32 percent on wet roads
- 31 percent at night
- 49 percent at intersections
- Social cost of crashes in 2007 was \$36.3m

Further information about 2003 to 2007 injury and non-injury crashes on Transit NZ roads

- Worst month July
- Worst day Friday
- 30 percent on wet roads
- 29 percent at night
- 56 percent at intersections
- Social cost of crashes in 2007 was \$19.4m

## Intersections

In Invercargill City during the period 2003 to 2007 there were 611 injury crashes at intersections and 716 non-injury crashes. In these crashes, 6 people died, 149 received serious injuries and 761 received minor injuries.

93 percent of these crashes were in urban areas of the district. These crashes make up 54 percent of all urban crashes. There were 92 intersection crashes in rural areas of the City.

Junction type Injury and Non-injury crashes		
Junction Type	Urban	Rural
Roundabout	140	3
Tee	405	51
Cross (X)	710	38
Multi leg	3	0
Total	1258	92

Over the last five years the number of non-injury crashes at intersections has generally risen.

Crashes at Intersections					
	2003	2004	2005	2006	2007
Injury crash	110	110	120	153	118
Non-injury crash	134	123	150	136	173
Total	244	233	270	289	291

The most common intersection crash is one where two drivers cross each others paths at right angles and collide. The second most common crash is when a driver turns right into the path of a vehicle approaching from the opposite direction.

The main causes contributing to crashes described in Police reports were:

- Not checking properly
- Failure to stop and give way
- Poor handling
- Speed

### Locations with high crash numbers

Intersection name	Total crashes 2003-2006	Total 2007
Tay Street / Elles Road	23	8
Tweed Street / Elles Road	19	11
Tweed Street / Clyde Street	23	6
Tay Street / Dee Street	22	7
Queens Drive / Gala Street	20	6
Tay Street / Rockdale Road	21	3

These locations are listed regardless of work done.

Further information about injury crashes at intersections 2003 to 2007 on local roads in Invercargill City :

- 5 deaths, 110 serious injuries and 554 minor injuries
- 7 percent involved alcohol
- 10 percent involved speed
- 30 percent wet roads
- 22 percent night time
- Worst month June, July
- Worst day of week Thursday
- Worst time 3 pm - 6 pm

Further information about injury crashes at intersections 2007 to 2007 on Transit NZ roads in Invercargill City:

- 1 deaths, 39 serious injuries and 207 minor injuries
- 7 percent involved alcohol
- 9 percent involved speed
- 28 percent wet roads
- 29 percent night time
- Worst month April
- Worst day of week Thursday
- Worst time 3 pm - 6 pm

## Young drivers

Young drivers are those aged less than 25 years.

This analysis is based on injury crashes only as driver age is not recorded in non-injury crashes.

In Invercargill City between 2003 and 2007 51 percent of injury crashes involved young drivers. These crashes resulted in 7 fatalities, 142 serious injuries and 734 minor injuries. Four of the seven fatalities were from the three fatal crashes in 2007.

The total number of injury crashes involving young drivers reduced in 2007 from the high of 132 in 2006. There is no obvious trend in the annual number of crashes involving young drivers.

Injury crashes involving young drivers				
	Fatal	Serious	Minor	Total
2003	1	22	77	100
2004	1	19	74	94
2005	0	27	94	121
2006	1	33	98	132
2007	3	17	87	107
Total	6	118	430	554

Over half of the 632 young drivers in these crashes had a learner or restricted licence. Nearly two thirds of them were males and 60 percent were 15-19 year olds. Seven were under 15 years old.

Nearly all the young drivers were local residents.

Young drivers in injury crashes (2003 - 2007)			
Licence type	Female	Male	Total
Full	71	143	214
Learner	40	59	99
Restricted	112	141	253
Overseas	2	4	6
Never licensed	5	11	16
Disqualified	0	18	18
Other (unknown, wrong class)	4	22	26
Total	234	398	632

### Injury crashes involving young drivers (2003 - 2007)

Crash type or contributory cause	Urban roads % of injury crashes	Rural roads % of injury crashes
Alcohol	10	14
Speed	18	34
Failed to stop/Give way	43	14
Poor handling	14	36
Poor observation	62	30
Lost control - straight	9	30
Lost control - bend	12	33
Rear end / obstruction	26	13
Crossing / turning	42	16

Further information about the 460 injury crashes involving young drivers on urban roads in Invercargill City 2003 to 2007:

- 70 percent were on local roads and 30 percent were on Transit NZ roads
- 78 percent involved more than one party
- 57 percent at intersections
- 34 percent at night
- 31 percent in the wet
- Worst month February
- Worst day of week Friday

Further information about the 94 injury crashes involving young drivers on rural roads in Invercargill City 2003 to 2007:

- 63 percent were on local roads and 37 percent were on Transit NZ roads
- 48 percent involved more than one party
- 31 percent at intersections
- 37 percent at night
- 43 percent in the wet
- Worst month April
- Worst day of week Wednesday, Saturday

## National issues

This section contains some brief information on the key national road safety issues as measured in Invercargill City. They may have been covered elsewhere in this document or not be a specific issue.

### Speed

In Invercargill City, "Too fast" was recorded in 131 fatal and injury crashes in the district in the last five years resulting in 6 deaths and 248 injuries. Speed as a factor in crashes is increasing in the district.

72 percent of all speed-related crashes were Lost control. Poor handling was the other driver factors most often associated with speed in injury crashes.

85 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 19 years

### Alcohol

In Invercargill City, alcohol was involved in 89 fatal and injury crashes in the district in the last five years resulting in 5 deaths, and 155 other injuries. The number of injury crashes involving alcohol is increasing.

84 percent of all alcohol crashes were in urban areas of the district. 40 percent were Loss of control on bends. Speed was the other factors often associated with alcohol in injury crashes.

89 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 24 years

### Failure to give way

In Invercargill City, failure to give way or stop was reported in 484 fatal and injury crashes during the last five years resulting in 3 deaths and 714 other injuries.

Poor observation was the driver factor most often associated with failure to give way.

56 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 19 years

### Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a regional level, and may not be fully appropriate to a Territorial Authority. The results are obtainable from the Ministry of Transport website.

<http://www.transport.govt.nz/belts-index/>